Patent Application of

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for

TITLE: METHOD OF TEACHING A FOREIGN LANGUAGE TO A STUDENT
PROVIDING MEASUREMENT IN A CONTEXT BASED LEARNING SYSTEM

CROSS-REFERENCE TO RELATED APPLICATIONS: Not Applicable

FEDERALLY SPONSORED RESEARCH: Not Applicable

SEQUENCE LISTING OR PROGRAM: Not Applicable

TECHNICAL FIELD OF INVENTION

The present invention relates generally to a self directed foreign language learning aid
and method of learning, and in particular an aid and method in which the learner chooses content
of interest for listening and reading, storage, and analysis of the learners words and lexical
phrases utilizing personalized databases through interaction with a web based computer system.
The learner can also interact with other learners and native speaking coaches.

BACKGROUND OF THE INVENTION

Increased globalization and technological advances have increased the demands for
fluency and literacy in a variety of languages. The desirability and benefits of being multi-
lingual have never been greater, creating an overwhelming interest in foreign language learning
aids, techniques, and methods.

Traditional learning aids typically include classroom instruction, flash cards, audio
cassettes, CDs, magazine, and books. Each of theses traditional teaching aids has their own
advantages and disadvantages. For example, classroom instruction provides instant feedback
and promotes interaction among learners, but requires students to study pre-determined topics on
a set schedule and pace. While the other aids such as flash cards, magazines, books are relatively

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inexpensive they do not provide any degree of audible feedback for the learner nor do they provide any degree of feedback correction for mispronunciation or grammar.

More recently web based software programs have become available for teaching and learning foreign languages. The popularity of computer software and web based programs for teaching and learning foreign language has increased along with the proliferation of Internet (web) access and home computers. Computers have a significant advantage over traditional teaching aids since they have the ability to combine text, sound, and graphics that create an interactive learning experience. However, current software programs and web based systems are developed around pre-determined vocabulary lists and learning schedules or software modules that are designed to teach and develop literacy and fluency in a new language.

Despite the progress that has been made, there is still a need for the development of a web based, learning system that allows a learner to set their own schedule and learning pace by learning a language using content that is of interest to the learner, not pre-determined. Learners spending hours on isolated vocabulary lists do not develop the ability to use or understand this vocabulary in real-life situations. In contrast to the prior art discussed above, the present invention promotes the learning process by providing a language learning system based on increasing vocabulary in a way that is linked to familiar content and therefore can be used in everyday situations. The present invention is based on a system which continually measures and tracks a learner's vocabulary, phrases, and writing mistakes through study on the learner's own time and pace. It integrates the words and phrases learned with content chosen by the learner and written output created by the learner.

The present invention has the potential to accelerate language learning by implementing new techniques that reflect many of the most recent discoveries about how languages are acquired, while avoiding the disadvantages of the traditional didactic methods. The present invention is an integrated ,web based, computer system that relies on the well observed fact that language learning success depends on motivating and empowering the learner. The learner is asked to read and repetitively listen to authentic content. This is widely recognized to be an effective way to learn a new language if the learner can choose content that is familiar, interesting and at an appropriate level of complexity for the learner.

The present invention improves on the prior art by adding the previously mentioned learning components while allowing the learner to choose the content from a library of topics

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that are of interest to the learner. This is in stark contrast to the prior art which has content based on topics specifically designed for the language learner which are very often uninteresting and a chore to study. All language learners do not have the same interests or learning ability which is why this present invention's library provides authentic content on a wide range of subjects, at varying difficulty levels, that the learner can pick from. As well as web based discussions with native speaker coaches on a range of topics that the learner is free to suggest. In this way the learner can almost forget the he/she is studying a new language as they listen, read, or speak and really try to understand. The learning of proper syntax and vocabulary is facilitated by the integrated and unique features of the system, while the learner pursues subjects of interest

SUMMARY

The present invention is an improved method of foreign language learning using a computer for providing web-based learning. The invention is a breakthrough in four important ways. First, it enables the learner to select authentic language content that is suited to the learner's vocabulary level, instead of having to rely on textbooks based on a pre-determined skill level and topic. Secondly, it combines context based vocabulary learning and the individual study of words and phrases through the use of a unique database. A third component links the recognition of phrases in language input (reading and listening) with phrases in language output (writing) and thereby bypasses the conventional teaching of grammar rules. This is reinforced by the use of measurement, which provides motivation for the learner and useful feedback to the teacher.

The emphasis on repetitive input of comprehensible material is a well known principle of language learning. However, this approach needs to go hand in hand with a systematic and effective way to acquire new vocabulary. The invention recognizes that the acquisition of vocabulary is the single most important process in developing language power. With a large enough vocabulary, the learner can even overcome problems of grammar or syntax and still communicate important concepts. Yet vocabulary acquisition is a complex process. The learner progresses from a passive ability to recognize one meaning of a new word, to a broader understanding of the meanings and nuances of a word, to a level of comfort at using a word, to a confidence in knowing what words are usually associated (collocated) with that word in

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expressions. This process requires frequent exposure through study and reading, and regular usage of the word in writing and speaking. The integration of listening, reading, tracking, coaching, talking, chatting with proper measurement in one system greatly improves the learner's ability to acquire the target language.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 illustrates the components of a web based language learning system;

FIG. 2 illustrates a block diagram of steps used to facilitate web based language learning;

FIG. 3 illustrates a typical control panel graphical user interface (GUI) according to an embodiment of the present invention;

FIG. 4 illustrates interactions of the word card feature according to an embodiment of the present invention;

FIG. 5 illustrates the databases and connectivity in a possible embodiment of the invention;

FIG. 6 illustrates a flow diagram of the writing correction feature of the language learning method;

FIG. 7 illustrates a typical graphical user interface (GUI) according to an embodiment of the present invention;

FIG. 8 illustrates the phrase card system

DETAILED DESCRIPTION OF THE INVENTION

Method of language learning in which the learner chooses content of interest for listening and reading, storage, and analysis of the learner's words and lexical phrases utilizing personalized databases through interaction with a web based computer system.

Fig. 1 shows a network of computers 10 that may be used to deliver the web based learning system and method. The network 10 includes a host system 11 that provides access to learner computers 12-13. Each learner computer includes a processor; memory; user input device such as microphone, keyboard, and/or mouse; output device such as a speaker, printer, and/or monitor. Leaner computers 12-13 are permitted to communicate with the host system 11 to obtain programs and data stored on the host system 11.

The host computer 11 includes one or more databases 14 for storing the language learning program and data. A large amount of data may be stored on the host computer 11 such as text, audio, video, graphics, animation, illustrations and a dictionary. A learner, while accessing the host computer 11 from a learner computer 12-13 may store information such as word lists, writing samples, and audio samples for review by language coaches. A language coach may access the host system 11 and databases 14 from a language coach computer 15-16 for such purposes as review, analysis, discussion and reading of learner's work. A language coach or learner may access the host computer 11 and databases 14 from any computer 17-18 connect to the Internet from any location.

Referring now to Fig. 2, the method includes a learner login 20 through a web based program onto the host computer 11 to commence the learning experience. The host computer 11 accesses a learner profile 21 consisting of a word card database 22 and a phrase card database 23. Once learner login 20 is complete the web based system enables the user to select from a control panel 30, as depicted in Fig. 3, possessing a series of selectable instruction sessions that include: Word and Phrases 31, Content Center 32, Workdesk 33, Pronunciation 34, Writing 35, Progress 36 and Community 37. Learner selects an instructional session 24, instruction commences 25, the learner selects words or phrases for inclusion in the word card database 22 or phrase card database 23 as appropriate, learner then selects a new instructional session or logs off 27 host computer 11.

Referring to Fig. 4 the word and phrases 31 instructional session enables the learner to learn new words and phrases by systematically reading and hearing new word and phrases individually and in context. The invention creates a database of word cards 40 for each new word 41. Each word card 42 automatically collects example sentences 43 of the new word from contexts that the learner has encountered in reading and listening 44. The word card 42 also collects example sentences 43 of the correct use of the new word 41 from the learner's writing 45. The word card 42 automatically creates a subject category for the word.

The invention also allows the learner to create a tag 46 for the word to identify some other attribute 47 of the word that is useful to the learner. The learner can also control the frequency with which the word appears in a daily review of words that are being learned. This provides the learner with many different ways of reviewing words that are being studied such as, but not limited to, a daily review, review of sample sentences that originate in familiar content.

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Additionally, the user can chose to place the word card in a customized word lists 48 based on different attributes of the word, including its prefix, suffix or root word. The learner can then use these customized lists in language output (speaking and writing).

Referring to Fig. 5, there are a number of databases used in this learning method. A learner, after creating a user profile 21 the learner has access not only to their custom word list database 50, word card database 51, but to the content center instructional session which allows the learner to chose content from a language library database 52 that consists of a dictionary and many study topics since language is often best learned when a learn is interested in the study topics. The language library is stored in database format and contains of a dictionary 67 and a rage of topics 56-61 covering a range of languages 53-55. The language library contains interesting content covering a wide variety of topics that is produced in live conversation 62 between two native speakers or a more formal article 63. The content center also enables the learner to choose the right level of difficulty from a range of difficulty levels 64-66 found in the language library database 52.

The workdesk session provides a web-based platform where the learner can chose something of interest, listen to it, read it, and download it to their home computer. When the learner is in a workdesk session, it also provides the unique ability allow the learner to vary their reading by using the well known computer cut and paste method to insert or import outside content into the workdesk where the learner can then listen to it or read it at a later time and take advantage of the unique features of the system with this imported content.

The pronunciation session focuses the learner on problem words, sounds and sentence rhythm. In this session the learner will listen repeat and record their own voice for comparison with proper pronunciation and rhythm.

Now referring to Fig. 6 the present invention measures language output as well as language input through the writing instruction session 60 learner where learner first selects the writing instruction session 61 that allows the learner to use what they have learned by submitting their writing for correction 62. The present invention includes a unique writing corrector program which converts incorrect syntax into correct phrases 63, list the corrections and proposes correct phrases 64, identifies the nature of the mistake 65, creates a corrected version of the written text 66 to compare with the original, and develops an ongoing statistical analysis 67of the kinds of errors made by the learner and the frequency of errors.

The writing sample and report 68 generated by the word corrector is then return to the learner 69 and stored in the learner profile 21. In this way the learner and the teacher can focus on the most frequent kind of syntactical errors and monitor his/her progress. The learner can also integrate the language output activity with the vocabulary acquisition and reading/listening activities of the program as both share the same database of words and phrases

Now referring to Fig. 7, the progress instruction session 70 allows the learner to track their progress through a number of categories. The learner can track the time 71 they spend working on learning the new language, set goals 72, and design a daily plan of study. The database of word cards allows an ongoing measurement of words learned and words known. This database allows the learner to choose new content that is appropriate to his/her level. The measurement of words known and learned can be compared to the learner's own goals and to the record of other learners. The invention also measures how often the word has been encountered (passively learned) and used (actively learned) in writing. The learner's progress report is also stored in their learner profile 21 and can be shared with an optional online coach.

If the learner chooses to use a language teaching coach, the learning method provides the learner with a weekly one on one session with their coach over the web based system, writing correction and analysis by their coach and a weekly report created by the coach detailing and analyzing the learner's progress.

It is widely recognized that languages are learned more effectively in the form of blocks of words that naturally belong together in lexical phrases rather than by using the out-dated model of learning grammar and vocabulary as separate activities. The invention makes it possible for the learner to save useful phrases and create phrase cards in the same manner as the word cards described above.

Now referring to Fig. 8 each phrase card 80 automatically collects example sentences 81 of the new phrase from contexts that the learner has encountered in reading and listening. The phrase card also collects example sentences of the correct use of the new phrase from the learner's writing 82. The phrase card automatically creates a subject category for the phrase. The invention also allows the learner to create a tag 83 for the phrase to identify some other attribute 84 of the phrase that is useful to the learner. The learner can also control the frequency with which the phrase appears in a daily review of phrases that are being learned. This provides the learner with many different ways of reviewing phrases that are being studied such as, but not

limited to, the daily review, review of sample sentences that originate in familiar content.

The creation of customized lists 85 based on different attributes 84 of the phrase, including the component words that are collocated in the phrase. The learner can then use these customized lists 85 in language output (speaking and writing).

The invention integrates all aspects of language learning. The web based community provides opportunities for learners to meet and communicate on subjects of interest, with coaches and with other learners.

Although the description above contain many specificities, these should not be construed as limiting the scope of the invention but as merely providing illustrations of some of the presently preferred embodiments of this invention. Thus, the scope of the invention should be determined by the appended claims and their legal equivalents, rather than by the examples given.